

AMENDMENTS TO THE CLAIMS

1. (Currently amended) Method A method for increasing plant yield relative to corresponding wild type plants, comprising introducing into a plant a nucleic acid encoding a D-type Cyclin Dependent Kinase (CDKD).
2. (Currently amended) Method The method according to claim 1, wherein said increased yield is increased seed yield.
3. (Currently amended) Method The method according to claim 1 [~~or 2~~], wherein said increased yield is selected from the group consisting of (i) increased biomass of one or more parts of a plant; (ii) increased seed biomass; (iii) increased number of (filled) seeds; (iv) increased seed size; (v) increased seed volume; (vi) increased harvest index; and (vii) increased thousand kernel weight (TKW).
4. (Currently amended) Method The method according to ~~any one of claims 1 to 3~~ claim 1, wherein said nucleic acid encodes a CDKD or a functional variant thereof and wherein said nucleic acid is obtained from a plant.
5. (Currently amended) Method The method according to ~~any one of claims 1 to 4~~ claim 1, wherein said nucleic acid encoding a CDKD is represented by SEQ ID NO: 1 or is a functional variant thereof and wherein the CDKD polypeptide is represented by SEQ ID NO: 2 or is a functional variant thereof, which functional variant is selected from the group consisting of:
 - (i) Portions of a nucleic acid represented by the sequence of SEQ ID NO: 1;
 - (ii) Sequences capable of hybridising to a nucleic acid represented by the sequence of SEQ ID NO: 1;
 - (iii) Alternative splice variants of a nucleic acid represented by the sequence of SEQ ID NO: 1;
 - (iv) Allelic variants of a nucleic acid represented by the sequence of SEQ ID NO: 1; and

(v) Homologues, derivatives and active fragments of an amino acid represented by the sequence of SEQ ID NO: 2.

6. (Currently amended) ~~Method~~ The method according to ~~any one of claims 1 to 5~~ claim 1, wherein said nucleic acid sequence encoding a CDKD is overexpressed in a plant.

7. (Currently amended) ~~Method~~ The method according to ~~any one of claims 1 to 6~~ claim 1, wherein expression of said nucleic acid encoding a CDKD is driven by a constitutive promoter.

8. (Currently amended) ~~Method~~ A method for the production of a transgenic plant having increased yield, which method comprises:

- (i) introducing into a plant or plant cell a CDKD-encoding nucleic acid or a functional variant thereof
- (ii) cultivating the plant cell under conditions promoting regeneration and mature plant growth.

9. (Currently amended) ~~Method~~ The method according to claim 8, wherein said increased yield is increased seed yield.

10. (Currently amended) ~~Method~~ A method for increasing plant yield, ~~especially seed yield~~, comprising introducing a genetic modification into a plant in the locus of a gene encoding a CDKD polypeptide or a functional variant thereof.

11. (Currently amended) ~~Method~~ The method according to claim 10, wherein said genetic modification is effected by one of: site-directed mutagenesis, homologous recombination, tilling and/or T-DNA activation.

12. (Currently amended) ~~Plants~~ A plant obtainable by a method according to ~~any of claims 1 to 11~~ claim 1.

13. (Currently amended) ~~Construct~~ A construct comprising:

- (i) a CDKD-encoding nucleic acid or a functional variant thereof;

- (ii) one or more control sequence capable of driving expression of the nucleic acid sequence of (i); and optionally
- (iii) a transcription termination sequence.

14. (Currently amended) ~~Construct~~ The construct according to claim 13, wherein said control sequence is a constitutive promoter.

15. (Currently amended) ~~Plant A plant~~ transformed with a the construct according to claim 13 [or 14].

16. (Currently amended) ~~Transgenic A transgenic~~ plant having increased yield, characterised in that wherein said plant comprises an isolated nucleic acid encoding a CDKD or a functional variant thereof.

17. (Currently amended) ~~Transgenic~~ The transgenic plant according to claim 12, 15 or 16, wherein said plant is a monocotyledonous plant, such as sugar cane or wherein said plant is a cereal, such as rice, maize, wheat, barley, millet, rye, sorghum or oats.

18. (Currently amended) Harvestable parts of a plant according to ~~any one of claims 12 or 15 to 17~~ claim 12.

19. (Canceled).

20. (Currently amended) ~~Use~~ The method according to claim 19 2, wherein said seed yield includes one or more of the following: increased number of filled seeds, increased seed weight, increased harvest index and increased TKW.

21. (Currently amended) ~~Use~~ The method according to claim 19 or 20 1, wherein said CDKD is encoded by a nucleic acid as represented by SEQ ID NO: 1 or a functional variant thereof, or wherein said CDKD is an amino acid as represented by SEQ ID NO: 2 or a functional variant thereof.

22. (New) The method of claim 10, wherein said increased yield is increased seed yield.

23. (New) The transgenic plant according to claim 15, wherein said plant is selected from the group consisting of sugar cane, rice, maize, wheat, barley, millet, rye, sorghum or oats.

24. (New) The transgenic plant according to claim 17, wherein said monocotyledonous plant is a cereal.